



(12) **EUROPEAN PATENT APPLICATION**

(21) Application number : **94304014.7**

(51) Int. Cl.⁵ : **G10L 3/00, G10L 5/06, A01M 31/00**

(22) Date of filing : **03.06.94**

(30) Priority : **15.06.93 US 76751**

(43) Date of publication of application :
21.12.94 Bulletin 94/51

(84) Designated Contracting States :
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

(88) Date of deferred publication of search report :
22.03.95 Bulletin 95/12

(71) Applicant : **ONTARIO HYDRO**
700 University Avenue
Toronto, Ontario M5G 1X6 (CA)

(72) Inventor : **Patrick, Paul H.**
6345 Bell School Line
Milton, Ontario L9T 2Y1 (CA)
 Inventor : **Ramani, Narayan**
879 Lovington Crescent
Mississauga, Ontario L4W 3S6 (CA)
 Inventor : **Hanson, William G.**
52 Shaver Avenue South
Islington, Ontario M9B 3T4 (CA)
 Inventor : **Sheehan, Ronald W.**
R.R. No.1, Acton
Ontario L7J 2L7 (CA)
 Inventor : **Jennette, Robert L.**
3931 Whitemarsch Lane
Edgewater, MD. 21037 (US)

(74) Representative : **Sommerville, John Henry**
SOMMERVILLE & RUSHTON
11 Holywell Hill
St. Albans Hertfordshire, AL1 1EZ (GB)

(54) **Automated intelligent monitoring system.**

(57) The invention relates to an automated system for monitoring wildlife auditory data and recording same for subsequent analysis and identification. The system comprises one or more microphones (8) coupled to a recording apparatus (10) for recording wildlife vocalizations in digital format. The resultant recorded data is preprocessed, segmented, and analyzed by means of a neural network to identify the respective species. The system minimizes the need for human intervention and subjective interpretation of the recorded sounds.

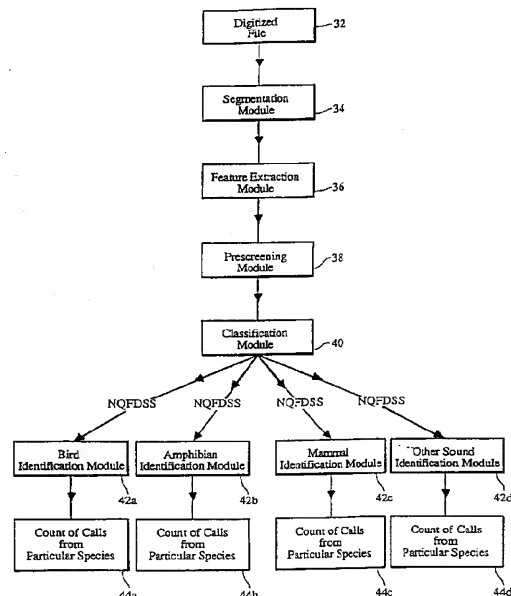


FIGURE 1



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Application Number
EP 94 30 4014

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
E	CA-A-2 089 597 (BAIN) * page 1 - page 2 *	1	G10L3/00 G10L5/06 A01M31/00
X	--- SIGNAL PROCESSING V. THEORIES AND APPLICATIONS. PROCEEDINGS OF THE FIFTH EUROPEAN SIGNAL PROCESSING CONFERENCE, EUSIPCO 90, vol.3, 1990, BARCELONA, ES pages 1643 - 1646 TROUILHET ET AL. 'Spectral signature recognition with a view to counting acoustic events' * paragraph 1-2 *	1	
X	--- US-A-4 965 552 (PRICE ET AL.) * column 1 - column 2, line 35 *	1,2,5	
A	--- US-A-4 895 025 (BETTS) * column 1, line 12 - column 2, line 38 *	1,2,5	
A	--- INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING 92, vol.2, 23 March 1992, SAN FRANCISCO, CA, US pages 189 - 192 SIU ET AL. 'An unsupervised, sequential learning algorithm for the segmentation of speech waveforms with multiple speakers' * paragraph 2 4 *	16	TECHNICAL FIELDS SEARCHED (Int.Cl.5) G10L A01M
A	--- INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING 92, vol.2, 23 March 1992, SAN FRANCISCO, CA, US pages 169 - 172 CHANG 'Augmented phonetic map for voice verification' * paragraph 4.4 *	18-20	

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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 25 January 1995	Examiner Lange, J
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ***** & : member of the same patent family, corresponding document	

EPO FORM 1503 03/92 (P4/C01)



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Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
A	IEEE INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS 91, vol.3, 18 November 1991, SINGAPORE pages 2752 - 2756 SUN ET AL. 'Some key factors in speaker recognition using neural network approach' * page 2753 - page 2755 * -----	18-22	
			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
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Place of search THE HAGUE		Date of completion of the search 25 January 1995	Examiner Lange, J
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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